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VOL. VII. NO. 13. CLEVELAND, O., MARCH 26, 1885. $2.00 PER ANNUM SINGLE COPIES 5 CENTS

AROUND THE LAKES.

CLEVELAND.

Warner & Becker, vessel agents, sold the schooner Francis Palms to Joseph Gilchrist and others, of Vermillion. Consideration $10,000 cash.

P. L. Lochlin & Son, yacht and boat builders, have completed several yawl boats and have commenced to build a dozen clinker row boats.

Captain Robert Greenhalgh's tugs Mary Virginia and C. E. Bolton have had their machinery and boilers overhauled ready for the opening of navigation.

Captain C. A. Richardson, of the tug Ralph, was in this city from Alpena last week, looking after the interests of his patent rudder holder and support.

The schooner Pelican is getting her fore and mainmasts taken out. Pressley & Co. will supply the new masts, which will be six feet shorter than the old ones.

Captain H. Henderson, who had a one-quarter share in the schooner Francis Palms, has purchased an interest in the schooner Kate Winslow and will sail her the coming season.

Captain James Condon, formerly a passenger steamer captain in the Lake Superior trade, who the season before last commanded the Tacoma, will next season commadn the Vienna.

J. C. Hemmeter, 125 River street, will double the size of his vessel supply store, by taking in a portion of Upson & Walton's store, which they will vacate on the 1st of April. He is getting the store painted and fixed up ready to supply his friends as soon as navigation opens.

The new iron steamship being built by the Globe Iron Ship-building Company has received her three masts, and also her engine. Her decks are all laid and calked, and fore cabin partly up. Her boiler is alongside and will be put in in a few days. She will be ready for launching in about two weeks.

W. H. Radcliffe, ship builder, is making a new foremast for the schooner G. H. Warmington, a new bowsprit for the schooner H. J. Webb, and he is giving the schooner Monterey some new stanchions, six new deck frames and entire new decks, new hatch-combings and hatches, a new rudder and other repairs.

A special joint meeting of the Canoe Club and Cleveland Yachting Association was held at the City Hall recently Commodore Gardner presiding, the object being to complete the arrangements for the meet to be held in July. A series of meets, in which the Cleveland, Toledo, and Detroit clubs will participate, will be held at Cleveland on the 16th, at Put-in-Bay on the 21st, at Toledo on the 28th, at Detroit probably on the 31st. The 30th had been named as the date for Detroit, and the secretary was instructed to request the Detroit Club to fix the 31st instead. A committee to prepare championship flags for the meet at the bay was named as follows: P. W. Rice, J. S. Williams H. Gerlach, and J. G. Downie. A committee was also named to secure grounds for a new club house on the west side, inside the breakwater. The following gentlemen compose the committee: P. W. Rice, R. E. Mix, and George W. Gardner. Mr. P. A. Mettling was elected a member of the association. The annual meeting of the Yachting Association will be held one week from next Saturday evening, and a full attendance of members is desired at that time.

Engineer O. N. Steele, who has gone to Chicago to look after the machinery of the iron propellors Onoko and William Chisholm, was very agreeably surprised Tuesday evening, when a host of his friends called at his house and conducted him to Lanberg's Hall, in Pearl st., where every arrangement had been made for a dance and supper. The supper had been brought along by the friends, who collected to the number of sixty couples. At the proper time Mr. Steele was decorated with two American flags, and Mr. Radcliffe approached him with a new broom and addressed him, saying, "That he had been a disturber of the peace of his friends during the entire winter, and had prevented them from enjoying the comforts of their firesides by inaugurating a system of sociables and dance parties, he must now prepare to be made the victim of this occasion." Mr. Steele, having looked suspiciously at the broom, was much relieved when Mr. Radcliff produced a fine gold chain graced with a keystone, with cabalistic letters upon it. The present was accompanied by a pleasant address, and responded to by Mr. Steel with much warmth. The surprise extended to the other members of the family also, as Mrs. Steele was presented with a silver cake basket and Miss Nellie with a silver cup and saucer, and little Matie with a silver napkin ring of unique design. The company spent the remaining hours in dancing to the Freeman's music.

ALPENA.

Special to the Marine Record.

The passenger steamer Golden Eagel has been getting an overhauling and her boiler turned around, so that she will fire from forward instead of aft.

The tug Fisherman has had a partial rebuild, comprising new decks, cabin, and wale strakes.

The tug Effie L., laid up at Bay City, is getting a new fire-box to her boiler and some repairs, and will come out in good shape next season.

F. W. Gilchrist has purchased the Michigan transfer car boat from the Chicago & Grand Trunk Railroad Company for $3,700. He will have her converted into an ark to carry logs from French River, Georgian Bay, to Alpena.

MT. CLEMENS.

Special to the Marine Record.

The new barge being built for the Tonawanda Barge Line, is progressing very fast. The calking is finished, her decks all on, and her cabin half finished, and her three spars ready to put in place. Mr. Suart, the builder, thinks she will be completed in about two weeks.

The following appointments have been made:

Captain William Stucker will command the new barge being built here for the Tonawanda Barge line; steambarge A. Weston, Captain William Dulack; steambarge Alleghany, Captain Southland; steambarge Handy Boy, Captain Robert M. Forton; steambarge J. S. Ruby, Captain John Ruby; steambarge Mt. Clemens, Captain Gilbert Lacroyx; steambarge Ida Burton, Captain John Tucker; passenger steamer Ida, Captain Albert Tucker; tow barge Jennett, Captain Cartwright; tow barge Fulton, Captain Peter Peltier; tow barge Albany, Captain Woodgriff; tow barge Nellie, Captain James Peltier. G. L.

EAST SAGINAW.

Special to the Marine Record.

No signs of a break up at this port yet.

The tug Standard is having $500 repairs made to her boiler at Wildman's shop.

The tug Florence, that was layed up at the Mayflower Mills dock, near the "Hot Water Box," sunk last Wednesday. She will be raised at once.

Messrs. Carkin, Stickney & Cram, have purchased from the Boom Company, the tug Edwin Eddy; consideration $3,500, which is considered a rare bargain.

Several attempts have been made to form a Tug Association for the river, but as yet without success.

A new steam yacht is being built at Midland, the diminsions of which are, 48 feet keel, 17 feet beam and 6 feet depth of hold. She is intended to run on the Tittabawassee River to Saginaw as an excursion boat. She will cost $2,500. It is thought here that this is a scheme to compel the Boom Company to keep the stream clear of logs, or pay the penalty of obstructing navigation.

Captain George King, Sr., of Bay City, is circulating a petition asking his appointment as harbor master at Sand Beach.

Captain Mike Madden has sold his one-sixth interest in the tug O. W. Cheney, to E. J. Vance, of Bay City, for a consideration of $1,100, and Hosea Pratt has sold his one-sixth interest in the same craft to Captain Madden; private terms.

The barge Matilda has received a new bow this winter which is a decided improvement.

Messrs. Carkin, Stickney & Cram have used 500,000 feet of lumber and timber, 40 tons of iron, and 100 kegs of spikes in their ship yard this winter, besides employing an average force of sixty men.

Quite a number of Eastern lumbermen have been in the city the past week, and as a result about ten million feet of lumber has changed hands. Two-thirds of it goes to Buffalo and Tonawanda.

The "M" line of steamers, tugs and barges will be officered this season as follows:

Steamship C. H. Green, Captain Mike Madden, Engineer Scott Pratt.

Steamship P. Chamberlain, Captain High Robertson, Mate Belfour, Engineer W. Stone.

Propeller O. W. Cheeney, Captain George King.

Propeller Tom Maytham, Captain Fred Barclay, Engineer John Davis.

Schooner Mattie C. Bell, Captain George Johnson, Mate B. J. June.

Schooner Rosa Sonsmith, Captain Chas. Sonsmith, Mate Lewis Housen.

Schooner A. T. Bliss, Captain Charles Van Norman, Mate Joe Schultz.

Schooner T. H. Cahoon, Captain Peter Edgar, Mate John Edgar.

Schooner Ida Corning, Captain M. J. Rogers, Mate John Howard.

Barge Mary Birckhead, Captain John N. Stewart, Mate Joe Mento.

Barge Fostoria, Captain John Hotherath.

Barge G. W. Wesley, Captain William Brown, Mate Hermman Komer.

Freights will probably open at $2.25 to Buffalo, and $1.75 to Ohio. SHAW.

MANITOWOC.

Geo. Olsen has purchased the schooner Wm. Finch at Chicago and will sail her the coming season.

The schooner Jos. Duval, built in this city in 1875, has been bought by Sheboygan parties, and will be used in the lumber trade the coming season. She will be commanded by William Lorenz.

The little tug Commodore Nutt, so well known here, is to be torn to pieces and her machinery put into a new hull. The work will be done at Clay Banks under the supervising of her owner Jas. Tufts Esq.—*Lake Shore Times.*

MILWAUKEE.

Special to the Marine Record.

Captain Barnes, of Maitowoc, was in this city, Monday, as a witness on the Scove collision case, also Mr. Rand, of Rand & Burger, of Manitowoc.

The appointments in the Milwaukee Tug Boat Company's tugs are as follows:

Tug Welcome, Captain Ed. Thorp; Hagerman, Captain Sweeney; Stark Brothers, Captaitn Hertz; E. D. Holton, Captain Downer; Dexter, Captain Sullivan; Merill, Captain Consaul. This tug line will not run a night tug this season, as the Stark Brothers and Holton will carry cooks, thus doing away with a night crew, as they will run nights.

In the Independent Tug Line there will be no change. Captain Gorman will command the S. S. Coe, and Frank Richerson the F. C. Maxon.

Last Wednesday I received an invitation to attend the second launch of the season, this time at the Milwaukee Ship Yard, and the steam barge owned by Chipman & Rosier, was let into the water amid the cheers and shouts of the admiring crowds of spectators as the launch was a perfect success, and a handsomer little barge has not been built than the new boat. She is named the Susie Chipman, after Mr. Chipman's daughter.

The Oneida was let out of the dry dock at Wolfe & Davison's last Tuesday, and the steam barge Jim Sheriffs, was run in again to complete the work on her new center board box, which is being pushed forward rapidly.

The tug John Evenson towed the schooner Gosshawk from Smith's elevator to Hamback's coal yard, where she will remain until navigation opens.

There will be a change of captains in the tug John Evenson this season, as Captain Oscar Greehalgh returns to Chicago to take charge of one of the Independent tugs. It is not yet settled who will go in the Evenson.

While the tug Maxon laid at the Independent Tug Company's dock, on Thursday morning, she filled and sank in twelve feet of water. A steam pump was placed on her and she was pumped out and raised. No leak of any amount has been found as yet, and no cause can be assigned for her sinking, as she was syphoned out at 9 o'clock on Wednesday evening.

Captain John Gilmore, of Racine, was in the city Monday. Also Captain F. M. Knapp, looking after the tug H. S. Sill, which is having a new boiler built for her.

The I. O. T. Co.'s barge is having a thorough calking all over and will come out in good shape this spring.

The tug Oconto was sold by H. W. Hart and C. B. Hart to Vanwinkle & Montague for $4,000. She is a light-draught boat, and will be employed at Garden Bay, Mich.

The tug John Evenson towed Wolf & Davidson's large flat scow to Broadway bridge, to receive the boilers for the new barge Susie Chipman, and after towing the scow to the shipyard, returned it to the old harbor. X. T.

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MARITIME LAW.

THE AVON—COLLISION—VESSEL AT ANCHOR—NIGHT LIGHTS—TORCH.

District Court, N. D. Illinois, January 5, 1885.

In Admiralty.

Robert Rae, for libelant.

C. C. Clarke and Williams & Potter, for respondent.

Blodgett, J. About 8 o'clock in the evening of October 29, 1880, a collision occurred on the navigable waters of Lake Michigan, off Milwaukee harbor, between the steam propeller Avon and the four masted schooner barge Thomas A. Scott, while the barge was lying at anchor, whereby the barge was sunk and became a total loss. The Phenix Insurance Company and the Faneuil Hall Insurance Company had each issued season policies of insurance on the hull of the barge for the sum of $2,000, which were in force at the time of the collision; and the Phenix Insurance Company, having reinsured the risk of the Faneuil Hall Comany, paid the loss on both policies, amounting to $4,000, and now brings this suit against the Avon to recover the amount so paid, alleging that the collision and the loss of the barge occurred solely by reason of the negligence and want of due care of those in charge of the Avon. The defenses set up are: (1) That the barge was anchored in an unsafe and improper place; (2) that the barge displayed two anchor lights, when, under the law, she should have shown but one; (3) that those in charge of the barge were guilty of contributory negligence in not showing a torch when they saw the Avon approaching the barge.

The proof shows, without dispute, that the barge in tow of the propeller Conemaugh was on a voyage from the port of Chicago to the port of Buffalo; that the Conemaugh, having occasion to enter the harbor of Milwaukee, dropped the barge a short distance outside the entrance to the harbor, and the barge came to anchor about half a mile nearly due east of the outer ends of the piers. The wind being southerly, she swung with her bow to the south, and her length over all being about 250 feet she may be said to have lain directly opposite or athwart the entrance to the harbor, although a half-mile out in the bay beyond the entrance. There was ample depth of water to the north and south of the barge to enable vessels leaving or entering the harbor to pass the barge either to the north or south, and the usual course of steam vessels bound to Chicago would carry them to the south, and those bound to the lower lakes would go to the north, of the place where the barge lay. The Avon, on a voyage from Buffalo to Chicago, entered the port of Milwaukee in the afternoon of the day of the collision, to discharge some freight, and left to pursue her voyage from Buffalo to Chicago, about 8 o'clock in the evening. She was assisted to wind in the harbor by the tug Merrill, and then proceeded down the harbor with her own power. The night was not very dark, but there was some smoke on the waters of the bay about the mouth of the harbor, which came from the rolling mills on the south side of the bay, about a mile and a half south or southeast of the ends of the piers.

The barge had her anchor watch on duty, the mate being officer of the deck, and a proper anchor light hung on the jib-halyards from 12 to 20 feet above the deck, and where it was in plain sight of those approaching her. The proof also shows that there was another light seen upon the afterpart of the barge; some of those who saw it concluding that it was a cabin light, and others thinking it was a lantern hung in the aft rigging. The officers and crew of the barge all concur in the statement that no light was intentionally set or displayed as a signal light in the after part of the barge, and my own conclusion is that the light seen by the tug men and crew of the life saving station on the after part of the vessel was a cabin light. But just a few moments before the Avon struck the barge, and when the collision was imminent, the mate of the barge took from the deckhouse a bright lantern, ran along the deck with it, swinging it to attract attention; and this light may have been set down on the top of the cabin, or hung up in some of the after rigging, and thus have been the after light to which the mates of the Avon say the captain called their attention after the collision, and before the barge went down. The Avon had her side lights and her masthead light duly placed, and all were brightly burning when she came down the harbor, and up to the time of the collision, and the proof is conclusive that her lights were plainly seen from the deck of the barge before she left the ends of the piers, until the collision. Why I say this fact is conclusively shown, is because it is unequivocally testified to be the crew of the barge, and several disinterested witnesses who were on board of tugs out in the bay, in the vicinity of the barge. The Avon had discharged some or all of her freight, so that she was down by the stern from the weight of her engines, and perhaps some freight aft, so that her bow was well out of water, and her lookout was stationed on her upper deck, forward of the wheel house, and the captain, who was officer of the deck, stood near, and in front of the wheel house.

As to the point made, that the barge was anchored in an unsafe place, I do not think the position is sustained by the proof. There was ample room for vessels leaving or entering the harbor to avoid her; and, in fact, the Avon, in laying her course for Chicago, after passing the end of the piers, would naturally have gone to the south of the space occupied by the barge. The half-mile intervening after the Avon was clear of the piers gave all the room that was needed to change her course, and go either to the south or north of the barge. For steam vessels, whose course was not controlled by the wind, the course for the lower lakes and to ports north and northeast of Milwaukee was to the north, and for those bound to Chicago the course was to the south of where the barge lay; and only as to those bound directly across the lake—say to Grand Haven or perhaps Muskegon—could the barge be said to lie directly in their path. So, too, a steamer leaving the harbor would not have obtained such headway at so short a distance from the ends of the piers as to make it difficult to stop or slow as at a greater distance out, when she had got under a full head of steam. And sail vessels, which are now invariably towed by steam tugs into and out of the large harbors of these lakes, like Milwaukee and Chicago, would much more readily avoid a collision with a vessel at anchor within a half mile of the entrance to the harbor than at a larger distance out, because the tugs, in taking them out, would tow them beyond the point where the barge lay to give them a good offing, and would take hold of those to be towed in at a point outside, because a vessel, as a matter of prudence, would hardly sail so close to the jaws of the pier without putting herself in charge of her tug. As vessels leaving Milwaukee harbor go to the southeast, northeast, or east, as their course to their ports of destination require, any vessel coming to anchor off the mouth of the harbor may be said to be in the pathway of some one. So, also, Milwaukee is one of the most important intermediate ports between Chicago and Buffalo, the *termini* of the great lake route; and the bay into which the harbor opens affords a safe and convenient anchoring ground for all vessels which have occasion to wait outside the harbor, and hence very many vessels engaged in commerce on the lakes have occasion to call at this port on their voyages between the upper and lower lake ports, and a vessel, therefore, can scarcely come to anchor in the bay outside the harbor of Milwaukee without being in the pathway of others arriving and departing, and this fact puts all vessels leaving or entering the harbor upon notice that a vigilant lookout must be kept for vessels at anchor off the mouth of the harbor. Upon the proof, then, I do not find that the Scott was at anchor in an improper or unsafe place, as to other vessels leaving the harbor of Milwaukee.

As to the second point, that the barge displayed two anchor lights, I have already said it is my conclusion, from the proof, that the barge had only one light set, which was intended as an anchor light, and that this light was hung in her jib-halyards, where it could be and was plainly seen and that, although two lights may have been seen on her, one was probably a light in her cabin, and the lantern swung by the mate, and afterwards hung over or placed on top of the cabin, may have been the other light mentioned by the witnesses on the Avon, from which they concluded that she had two anchor lights set. But even if she had two bright white lights hung in her rigging, one forward and the other aft, I do not see from the proof how that contributed to bring about the collision. In the first place, it did not confuse or deceive any one else. The tug men passing in or out of the harbor, and the men at the life station, were not misled by it; while, from the testimony of all the witnesses on the Avon, it is clear that they did not make out either light in time to have avoided the collision. There is no proof showing that the conduct or management of the Avon was in any degree embarrassed by the fact that they saw two lights, instead of one on the barge. When they discovered one or both the lights on the barge, and came to the conclusion that such light or lights were on a vessel at anchor, it was too late, by their own showing, to avoid the collision.

It is contended by respondents that a display of two lights by a vessel at anchor is in direct violation of the law, and therefore libelants cannot recover, because rule 2 says: "The lights mentioned in the following rules, and no others, shall be carried in all weathers between sunset and sunrise." And rule 10 says: "All vessels, whether steam vessels or sail vessels, when at anchor in roadsteads or fairways, shall, between sunset and sunrise, exhibit where it can best be seen, but at a height not exceeding 20 feet above the hull, a white light in a globular lantern of eight inches in diameter, and so constructed as to show a clear, uniform, and unbroken light, visable all around the horizon, and at a distance of at least one mile."

Under the facts in this case, as I find them from the proof, it is not necessary that the court shall decide whether a vessel lying at anchor may not and should not, under circumstances which can readily be imagined, display more than one anchor light, because the proof satisfies me, being that of her crew, who are presumed to have the best information as to what was done on board of her, that this barge set only one anchor light, and that at the proper height above the deck, and in a properly conspicuous place, and of the size and construction required by the rules; but, certainly, the rule does not require that a vessel at anchor shall extinguish or inboard her cabin lights so that no light can possibly be seen from any part of her hull. It seems to me the purpose of the rule was to have at least one bright white light set, so high as to be clearly visible from all directions, and which, from its comparative height, and the fact that it was stationary, would indicate at once that it was upon a vessel at anchor; but other lights, even in the rigging, or upon the hull, or in the cabin windows, would not contradict such indication or mislead an approaching vessel.

The hull of this barge was a trifle over 200 feet long, and if two lights had been displayed, one at each end, I cannot see how it could have misled any one on a vessel approaching her, because rays of light are not bent or deflected laterally in passing through the air so as to change the apparent locality of the source from whence they come. The lookout on the Avon states he saw the lights, and that they seemed to be at least a quarter of a mile apart; and hence it is argued that those in charge of the Avon were misled because they thought they were upon two different vessels, and steering between them. There is proof in the case showing there was a tug just a little to the north and outside of the Scott, which was showing her lights, and it is possible that the lookout of the Avon may have seen the tug light as well as the anchor light on the Scott; and, probably they would have been a quarter of a mile apart. But the idea that if there were two lights on the Scott, they would appear, under any circumstances, to have been further apart than they actually were, is absurd, from any point of view it is considered. Rays of light do not bend laterally. If they did so, you could see around a hill, and it would be impossible to run a straight line with compass or transit. It is true that, ligh in passing through *media* of differen densities, is refracted vertically in a slight degree; but the apparent position of an object in a lateral directions subject to no change from this cause. If it were otherwise, you could not steer in a straight line to a light at all. So I conclude, from the fact the lookout on the Avon says he saw these two lights far apart, as an excuse for not giving the alarm in time to avoid running into the Scott, shows that he either saw the light on the tug or else that he has fabricated an attempted excuse for his want of vigilance and intelligence. No prudent seaman, even if he saw what seemed to be two anchor lights 200 or 250 feet apart, would attempt to pass between them, on the supposition that they were on two different vessels; because the anchor light may be on the forward or after part of the vessel,—where, according to the judgment of those in charge of the vessel at anchor, it can be best seen,—and therefore a man in charge of an approaching vessel, when he sees an anchor light, and while the distance or the darkness prevents his seeing the exact situation of the hull, must take promptly the requisite steps to give the light so wide a berth as to pass clear of the vessel it is on. Not knowing which end of the vessel the light is displayed from, his only safety is in going far enough away to avoid a collision with even the largest and longest vessels and the same may be said if two lights are seen within a possible vessel's length apart,—he must go so far away as to clear both, if he shall conclude they are on different vessels.

[*To be continued next week.*]

GENERAL NEWS.

Captain John Traynor, who started from Bath, Me., September 25 to cross the Atlantic in a dory has not been heard from since and is given up for lost by his friends.

The London Engineer says that at the late fisheries exhibition, the United States was ahead of every other country in the interest and organization of its display. It favors the proposed American exposition in London, of which the preliminaries have already been settled by General Norton. May 1, 1886, has been fixed for the opening day.

A ship belonging to the Hudson Bay Company attempted to leave Hudson Bay last October with a cargo of furs, but could not get out of the Bay on account of the ice. October is, to be sure, late in the season, but this case is simply additional evidence against the practicability of the Hudson Bay as a grain route between the Canadian Northwest to Liverpool.

The steamer Louisiana, of the Cromwell line, left pier 9, New York, on Saturday, March 7, at 4:45 o'clock p. m. Passed Sandy Hook at 5:50 p. m. and arrived at wharf in New Orleans on Friday morning, the 13th at 2 o'clock, making the trip from wharf to wharf in 5 days, 9 hours and 15 minutes, and from bar to bar in a little less than 5 days. This is the quickest passage ever made from New York to New Orleans.

The Canadian Government is considering a scheme to fit out a number of armed schooners to watch the fishing grounds of the maritime provinces, and prevent American fishermen from taking fish in the Canadian waters. To do this they propose to arm and equip a number of schooners, which the Americans would be unable to distinguish from the ordinary fishing craft.

A French officer of engineers has conceived an idea for enabling a vessel on the high seas to communicate with the shore by means of the existing submarine cables. He proposes that these cables shall be supplied at convenient intervals with short branches, the ends of which shall be buoyed in such a manner that passing vessels, provided with the necessary batteries and with a key by which to obtain access to the wires may telegraph home.

The Chippewa County News says Ira H. Owen & Company, of Chicago, wil place on the Sault Ste. Marie and Cheboygan route, at the opening of navigation, the staunch new

steamer Minnie M. She carries 275 tons of freight, has state room accommodations for 50 passengers and can accommodate 400 excursionists. She will run in connection with the Detroit and Cleveland Steam Navigation Company, also the Michigan Central and Grand Rapids & Indiana railroads. She was built last season and is said to be very fast, making 16 miles an hour. Ira H. Owen resided and was in business here with his brother during the years of 1846, '47, and '48.

The Pacific railroad monopoly tried to kill the California clipper ship trade by use of a contract which prevented shippers, who were given special facilities, from shipping goods "around the Horn." The railroads have not been successful in their scheme. They now propose to accomplish their object by carrying to New Orleans by rail and thence to Liverpool by steamer all California wheat intended or export. They will be as unsuccessful is this move as in the other one. They cannot compete with the "clippers" for this trade. The all ocean route has advantages which the railroad, even were it bankrupt, could not overcome. California wheat will be shipped by way of the "Horn," the predictions of the railroad men to the contrary notwithstanding.

The bark Innerwick (Br.) from Yokohama, at Victoria, B. C., March 2, reported that at midnight of February 24, in lat 37 N, lon. 70:50 E, the wind was blowing heavily from SSE; at 5 a. m. the sky changed to a fiery red, and all at once a large mass of fire appeared over the vessel and fell into the sea some 50 yards to leeward, with a hissing sound, causing the bark to quiver from stem to stern. A towering mass of white foam was then seen rapidly approaching the vessel. The bark was struck flat aback, and before there was time to touch a brace the sails filled again, and the roaring white sea could be seen passing away ahead. Another sheet of flame then ran down the mizzenmast, from the rigging of which poured myriads of sparks, and for 20 minutes the strange redness of the sky remained.

DELAWARE SHIPBUILDING.

[Compiled for the MARINE RECORD from the Census Report for 1884 by Special Agent Henry Hall.]

At Wilmington, on the Delaware, beside the two yards devoted to the construction of wooden vessels, there are two large yards engaged in iron and steel shipbuilding. The industry was established here at an early date. The city is practically as near to cheap coal and iron as though it were planted upon the Schuylkill, and the same freight rates govern deliveries there from all parts of the country as at Philadelphia; in fact. iron shipyards can be located advantageously anywhere upon the western bank of the Delaware for a distance of ninety miles, so far as cheap materials are concerned. The two yards in Wilmington devoted to this industry are those of the Harlan & Hollinsworth Company and the Pusey & Jones Company. Both concerns build railway cars, but both have extensive ship-building plant, and rank among the four leading establishments in the United States devoted to the industry now under consideration.

The Harlan & Hollingsworth Company began business in 1836 and built the first iron coasting steamer constructed in the United States. In 1843 they turned their attention to the needs of the merchant marine, and after having turned out two small iron vessels, began the construction of the steamer Bangor, which was completed and launched in the following spring, and was, as stated, the pioneer of the great fleet of American-built iron steamers that has sprung into existence in the last forty years, to take the place of the old-time, heavy, wooden coasting craft. The success of the Bangor brought Wilmington at once into active competition with New York, as well as with the eastern wooden shipyards, in the construction of the large number of iron steamers which the coasting and inland trades began to demand. Wilmington had skilled labor and cheap materials, and a low scale of wages prevailed, because operatives could afford to accept them, on account of cheap rents and moderate living expenses. In the early years of the struggle to establish an American iron shipbuilding industry the Harlan & Hollingsworth Company stood practically alone, for there were then, few, if any, concerns in the country sufficiently well equipped to execute contracts regularly for the large class of iron vessels. The success of their yard was due to the fact that each vessel produced was built with as much care in design and construction as though it were being made by an owner for himself, and the behavior of the vessels afterward was, in consequence, a standing advertisement of the good qualities, both of iron ships and American work. The yard received many orders, and it has been busily engaged, from the first, in building iron vessels of every description, its product being the most varied of that of any American establishment. The concern covers forty-three acres of ground, on which there are about fifty different shops and buildings. Those employed in ship work are supplied with machinery modern in type and massive in build. The plant includes, among other things, shears for trimming heavy plates, planers, rolls for bending plates to the proper curvature on the sides of the ship, machines for punching rivet holes in frames and plates, hydraulic riveting apparatus, by means of which rivets can be clinched solidly with one thrust by steam power, frame-heating furnaces, bed-plates for bending the angle-iron frames to the proper out-line, steam hammers, mold-lofts and pattern shops, and the proper apparatus for constructing engines and boilers. On the wharf there is a set of masting shears that can handle a weight of 100 tons, and engines and boilers are lifted almost bodily into the air and deposited gently in their places in the hulls floating alongside. The secret of the success of iron shipbuilding in America is, in large part, the use of labor-saving machinery of this description. The water-front is 1,350 feet long, and the yard has a large drydock. About 3,000 men can be employed by this establishment. As in the case of the other iron shipyards with large plant, this constitutes a valuable resource of public importance to the United States; and it is safe to say that if the four large yards on the Deleware did not exist the government would be compelled to maintain several establishments of similar magnitude, for naval purposes, with their consequent great expense for the repairs necessary to keep them in order.

The Harlan & Hollingsworth Company is now building vessels of steel in response to the demand for the employment of that material. One iron sailing vessel, the bark Iron Age, built at this yard, was finished in 1869, and had the following dimensions: Length, 142 feet; beam, 30 feet; depth, 18½ feet. During the war there were constructed the following vessels for the government: The iron-clad, double-turreted monitor Amphitrite, the iron sloop-of-war Ranger, and the iron-clad monitors Patapsco, Saugus and Napa. Charles Morgan, of New York, was one of the first merchants to understand the advantage of iron hulls in the coasting trade, and up to 1882 this yard had built for his coasting lines no fewer than thirty-one iron steamers. Propellers of the largest and finest class have been the favorite product of the yard, but orders have also been taken for steam craft of almost every description, and during late years a study has been made of sidewheel bay and river steamboats. The work of this company, since its organization, aggregates 157 steam-propelled vessels, of which number 24 are ferries, 22 propellers, 32 steamships, 14 steamers, 2 dredges, 12 barges, one of which is iron, 7 tugs, 2 lighters, 3 iron-clad monitors, 4 launches, 1 sloop, 1 fire boat, 5 yacths, four of which are propelled by steam, 1 pilot boat, 1 transfer boat and 21 not classified. This company has also built 5 bell beacons, 1 bango, 1 bark and 1 collier. The aggregate tonnage of the above fleet is 132,606.

The Pusey & Jones Company has built about 100 iron vessels, eighty of them for foreign owners, chiefly in South America. A few of the above have been built of steel, on foreign account also. The yard has especially studied the requirements of the river trade of South America, and has made a large number of stern-wheel and side-wheel paddle boats.

One of the large vessels of this concern is the Hudson, built in 1874 for the Cromwell line to New Orleans, with engines on a new principle. The steamer is a two-decker, with cabins on the upper deck, and is schooner-rigged. Her dimensions are: Register, 1,872 tons; length on the load-line to the afterside of the stern-post, 280 feet; beam, molded, 34 feet; depth from upper deck to keel, 26 feet.

The engines of the majority of the propellers are of the compound, surface-condensing type, in which steam is expanded at a low pressure. In the Hudson, however, the working pressure is 65 pounds. The ship has been driven at an average of 12½ knots on a consumption of 20 tons of coal per day, and her speed often averages 14 knots for the whole trip to New Orleans.

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The sidewheel steamers **SAGINAW** and **EVENING STAR.** For information relative to condition of boats, terms, etc., apply to A. N. Moffat, manager Star Line Steamers, Detroit If not sold by April 10, will be sold at public auction to the highest bidder, in front of Parker & Millen's office, Griswold street, Detroit, at 12 o'clock, noon, same day.

A PRIZE. Send six cents for postage, and receive free, a costly box of goods which will help you to more money right away than anything else in this world. All of either sex succeed from the first hour. The broad road to fortune opens before the workers. Absolutely sure. At once address TRUE & Co, Augusta, Maine.

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This tug is 52 feet over all, 13 feet 3 inches beam, and 6 feet 6 inches depth of hold Engine, 13x14; steel boiler 4 feet 6 inches diameter by 9 feet long. The hull was built by Geo. H. Notter, Buffalo, and is an excellent model and well built. The tug is nearly new, having done only five month's work since she came out new last summer. She has a poop deck and finished cabin fore and aft, and classes A1. Price, $4,500. Address MARINE RECORD OFFICE.

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Commencing Sunday, May 11, 1884, at 12 o'clock noon the time given in the figures below is the new standard (Ninetieth meridian) time, which is thirty-three minutes slower than Cleveland time proper.

Eastward.	Arrive	Depart.
No 4, Fast Limited Express	*1 10 A M	*1 25 A M
No 8, N Y, B & A Express	*6 35 A M	*7 00 A M
No 26, Elyria Accommodation	†8 05 A M	.....
No 35, Buffalo Ac'm via Sandusky	†10 35 A M	†10 50 A M
No 35, Toledo Accom via Norwalk	†10 35 A M	†10 50 A M
No 12, N Y & B Fast Express	*1 55 P M	*2 25 P M
No 14, Special N Y & Bos Expres	.....	5 00 P M
No 2, Night Ex via Norwalk	9 40 P M	†10 00 P M
No 22, Night Ex via Sandusky	†9 42 P M	.....
No 26, Conneaut Accommodation	†4 25 P M	.....

Westward.	Arrive.	Depart.
No 1, Fast Limited Express	*11 55 A M	*12 05 A M
No 23, Mich Express via Sandusky	*2 15 A M	*2 35 A M
No 3, Chicago Express via "	‡6 05 A M	6 30 A M
No 25, Mich Accom Norwalk	.....	†6 10 A M
No 21, Toledo Ex via Norwalk	†12 50 P M	†3 20 P M
No 5, St Louis Ex via Sandusky	†12 05 P M	12 50 P M
No 9, Chi Pac Fx via Norwalk	*6 10 P M	*6 40 P M
No 31, Elyria ac to Elyria only	.....	†4 30 P M
No 27, Conneaut Accommodation	†8 10 A M	.....

Sunday train for Nottingham—Depart 8:30 a. m. and 1:45 p. m.; returning, leave Nottingham at 9:05 a. m. and 3:45 p. m.

Reference marks—* Daily, † daily, except Sunday, ‡ daily, except Monday.

For full information as to trains and connections apply at the new city ticket office, corner Seneca and St. Clair streets, Lake Shore block.

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Following is the time in effect Oct. 6. 1884, and until further notice:

GOING EAST.		LV. — AR	GOING WEST.	
	A. M.		P. M.	
.....	7 50	Chicago	7 50	.....
.....	9 50	Valparaiso	5 42	.....
	P. M.			
.....	1 50	Fort Wayne	2 10	.....
.....	2 05	New Haven	1 35	.....
			A. M.	
.....	3 48	Leipsic	11 36	.....
.....	4 46	Arcadia	10 35	.....
A. M.				P. M.
6 50	5 00	Fostoria	10 22	8 50
7 35	5 45	Green Springs	9 44	8 05
8 15	6 20	Bellevue	9 20	7 40
10 45	9 02	AR. Cleveland Lv.	6 45	4 51
11 55	.....	Painesville	.....	3 34
P. M.				
12 44	.....	Ashtabula	.....	2 43
1 14	.....	Conneaut	.....	2 13
2 33	.....	Erie	.....	12 50
				A. M.
4 09	.....	Dunkirk	.....	11 16
				A. M.
5 45	.....	AR. Buffalo Lv.	.....	9 49

Through tickets to all points are on sale at principal offices of the company at LOWEST RATES for any class of tickets desired. Baggage checked to destination

For information, call on nearest agent of the Company, or address

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BEE LINE.

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	Depart.
No. 3, Columbus, Cincinnati & Ind Ex	9:00 A M
No. 23, Galion & Wheeling Express	6:50 A M
No. 9, Col., Cin., Ind & St. Louis Ex	*6:50 P M
No. 5, Col. Cin., Ind. & St. Louis Express	*12 25 P M
No. 27, Galion & C.L & W. Acc	3:30 P M
No. 29, Massillon & Ulrichsville Ex	4.30 P M
	Arrive.
No. 8, Col, Cin, Ind. & St. Louis Exp	*6:40 A M
No. 20, Uhricsville & Massillon Ex	8:55 A M
No. 2, Col. Cin. & Indianapolis Express	9:50 P M
No. 14, St. Louis, Ind., Cin. & Col. Ex	*4:45 P M
No. 22, Galion Acc	9:20 A M
No. 26, Wheeling Accom	4:15 P M
No. 4, Col., Cin. & N. Y. Express	1:15 A M

Trains marked * daily, all other trains daily except Sunday

E. B. THOMAS, General Manager. O. B. SKINNER, Traffic Manager.

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The Marine Record.

Published Every Thursday at 144 Superior Street, [Leader Building.]

A. A. POMEROY, Editor and Proprietor.

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CLEVELAND, OHIO, THURSDAY, MARCH 26.

THE CANAL POOL.

We have written much on railroad pools and their baleful effects on inter-state commerce, but it is apparent that the railroads are not alone in this reprehensible business of controlling our commerce. The elevators handling the grain which passes through Erie canal have adopted the same system. At Buffalo there are about thirty elevators, each built, apparently to accommodate its share of the business. But in reality eight or ten of these elevators do all of the business, the others, without expense or activity, without handling even a bushel of grain in a season, receive large dividends from the profits of the extortionate charges made on the traffic by those actively engaged. It will be seen at a glance that this mode of proceedure is a burden on the tonnage of the lakes, that the heavy charges made by these elevators have an evil influence on freights when it is considered that grain must be laid down on the seaboard at as small a cost for transportation as possible. It will also be seen that the policy of the elevator corporations, in buying off two-thirds of the opposition, paying the premium from funds indirectly levied upon lake tonnage, is to enhance their own profits the result of which is to effect the demoralization of the business of the country to a great extent, and deserves legislative action. A bill is now before the New York legislature, the object of which is to compel the handling of grain at points of transhipment at reasonable rates, and vessel owners and boatmen, who have become weary of doing the work and bearing the expense of transporting the grain through the entire system of lake and canal navigation for the benefit of those sharpers, should earnestly recommend and work for its passage. The Erie canal has been an important factor in advancing the prosperity and growth of Buffalo and other York State cities, and the people of the cities referred to should, by all means, adopt energetic measures to break up this demoralizing ring. When the ultimate efforts of the elevator extortions upon the fate of the canals are so apparent, it would be presumed that the grip would be loosened, that the elevator charges would be moderated, in order to prevent the grain traffic from seeking the Welland canal for an outlet, but it is not so. They tighten on the trade and draw the strings of the pool bag still more closely, thus making nugatory the liberal policy of of the state of New York in declaring the canal free of toll. "The history of Buffalo, in connection with the canals, says the Oswego Express, shows that that city regards the canal as having been dug expressly for her that, in fact, it is a part of the assets of the city, and that when the time comes that they can not be longer run for the benefit of that city she will have no further interest in them." Therefore, it is incumbent upon the people who worked successfully for making the canals free of toll to labor in this behalf, to secure the passage of this bill to regulate the elevator charges to a just and proper standard.

This policy of extortion, unless it is neutralized in due time, may, however, prove a blessing in disguise, and at an early day assist natural causes to compel the alternative of constructing an American canal around Niagara, in order to save this immense and ever growing grain traffic. There is at this day no reason why this improvement should not be made to our system of lake navigation, and we trust that at an early day the MARINE RECORD will be authorized to publish that the work has been ordered.

IN regard to the disaster to the steamer Michigan Captain Prindiville, says that she was well down in the water when the squeeze came which crushed her. He says that the tug Arctic, to which they escaped, and on which several men still remain, is perfectly safe, lying on top of the ice, so that she cannot be gripped, and that when the thaw comes she will settle easily into the water. Captain Prindiville says that he never before saw so much ice in the lake. For sixty miles south of the Straits of Mackinaw the ice is solid entirely across, and of an average thickness of thirty inches. He believes it to be impossible for vessels to get through the straits to Buffalo before June 1. With regard to the propeller Wisconsin, which is the twin of the lost Michigan, Prindiville said that Captain McGregor, her commander, was a skillful and brave seaman, and if any man could rescue her he could. She was more heavily loaded than the Michigan, deeper in the water, and therefore more subject to the grip of the ice. It might be that she had already suffered the same fate as the Michigan.

THE first number of the *Inland Marine*, a new candidate for the patronage of lakemen, reached us this week. The number before us is ably edited and contains a great quantity of marine news, covering the past four months. We welcome it heartily into the field of inland marine, which is a broad one, and trust it will aid us in advancing the interests of lake navigation. Although the name of the editor is at the head of the paper, that of the publisher does not appear. We understand, however, that Mr. W. W. Bates, who has written many articles for publication, is the publisher. Mr. Bates is a ship-builder of considerable repute, and took a contract during the winter, in Chicago, to build a hull for the machinery of the steam yacht Brett Harte. Mr. Bates has been on the Pacific coast during the last three years and returned to Chicago last season.

Lewis F. Leopold died March 19, at his residence, 38 Sixteenth street, of apoplexy, aged 66 years. He was well known as one of the firm of Leopold & Austrian, controlling the Lake Michigan and Lake Superior line of steamers running between this port and Duluth.

LATEST reports concerning the war cloud in the east are serious and it is thought that hostilities can not be avoided, although neither England or Russia is spoiling for a fight.

ST. LOUIS.

Special Correspondence Marine Record:

ST. LOUIS, MO., 23.

There is no change from the condition of things when my last letter was sent out, excepting a little cold spell, which made all the boys tremble in their boats for fear of another freeze up. The lower river is not high enough to make navigation a dead sure thing, for the great Will S. Hays stuck fast on her initial trip and lost several days.

The boats in the upper river are begining to appear at the wharf for loads, and the complete reuemption of navigation is now only a question of a short time. The Alton packet makes tri-weekly trips instead of daily ones as she will in the summer season. The Clarksvills packet has gone on her summer trade in the upper Mississippi, while Captain D H. Silver has wheeled the C. C. Carroll into the Missouri river, to run from here to Kansas City, with a fair outlook for a good seasons work. J. H. H.

OFFICIAL NUMBERS AND SIGNAL LETTERS.

To the Editor of the Marine Record:

TREASURY DEPARTMENT,
BUREAU OF NAVIGATION.
March 19, 1885.

Following is a list of merchant vessels of the United States to which official numbers and signal letters were assigned by the Bureau of Navigation, Treasury Deparment, during the week ended March. 14, 1885.

SAIL VESSELS. Name.	Rig.	Signal Letters.	Official Number.	Tonnage. Gross.	Tonnage. Net.	Home Port.
Addie.	Sc.	.....	106,340	55.15	52.39	Wilmington, - N C.
Anna F. Hursley.	Sc.	.....	106,341	6 44	6 44	Sault Ste Marie, - Mich
Laura L.	Sl.	.....	140.763	9.83	9.32	Charleston, - - S. C.
Melissa D. Robbins.	Sc.	.....	91.748	90.67	86 17	Portland, - - - Me
Sampson.	Sl.	.....	116.038	12.72	12.09	Charleston, - - S. C
Triton.	Sc.	.....	145 401	5 37	5 37	Astoria, - - - Oreg
STEAM VESSELS.						
Cape Charles.	St. p.	K C. W. F	126.278	940.83	648.66	Wilmington, - - Del
Maryland.	St. p.	.....	91,747	22.62	11.31	Baltimore, - - - Md
Mitchell.	St. p.	.....	91,749	27.91	27.91	Mobile, - - - Ala
Wakefield.	St. p.	.....	81,065	571 05	465 54	Washington, - D. C.

JARVIS PATTON, Commissioner.

[*Continued from 1st Page*]

BUFFALO.

Special to the Marine Record.

General Manager Caldwell, of the Western Transit Company, has just made the following appointments of masters for the steamers of that line for the ensuing season: Steamships Albany, Frank Williams; Syracuse, Robert Jones; propellers Boston, Valentine Jones; Arabia, Patrick O'Shea; Buffalo, James Drake, Chicago, James H. Dissett; Commodore, Richard D. Gardner; Milwaukee, James Carlisle; Montana, John Cornish; Vanderbilt, Donald Gillies; Empire State, Delos Waite; Badger State, J. H. Ivers; Idaho, Alexander Clark; Fountain City, James Greene. Captain Duncan Blue who sailed the Badger State last season, was not reappointed. The steamers will be placed as heretofore, the Empire, Badger State, Fountain City, and Idaho going into the Lake Superior Transit Line, while the rest will run to Chicago.

PORT HURON.

The Port Huron Commercial says Captain A. A. Cox will command the Jesse H. Farwell this season.

Captain Frank Hebner is getting the City of Concord in shape for the opening of navigation.

The large new boat, the skeleton of which has stood on the stocks at Dunford & Alverson's drydock for the past year or so, is rapidly approaching completion. The deck has been put on and cabin finished, and it will be ready for launching with the opening of navigation. A large number of men are employed by Dunford & Alverson.

Love & Schofield are building a new steel boiler for the propeller Roanoke. It will be the largest boiler over turned out in this city.

Marine men are kept busy these days fitting out their boats and speculating, when not more actively engaged, on the probable date of the opening of navigation.

AMHERSTBURG.

The taxes on the steambarge C. N. Pratt, which is owned by Windsor parties, have not been paid for two or three years, and for fear the vessel might go up in smoke or be spirited away, the town solons of Windsor, are trying to device some scheme to collect the money, which amounts to about $500.

DETROIT.

Special to the Marine Record.

March 24.—The cold spell lingers hereabout, presumably as elsewhere, notwithstanding there were a few balmy days, sufficient to clear the ice between Detroit and Windsor and as far down as Sandwich Point, but no farther. Yet to the surprise of the oldest inhabitant, another cold wave tripped along this way, and quite as sever as any that has preceded it during the entire winter, and the Detroit River again placed under a state of blockade, which even those who have had an existence here of half a century have no recollection of. With this record of the weather before us, it may be safe to predict under any and all circumstances, that there will be a late opening of navigation, and no arrivals or departures at Buffalo before the middle of May, or at extreme points westward. Yet shipmasters and owners do not by any means, feel gloomy over this view of the situation, and think upon the whole it will be all for the better. The sailors, however, or those who serve by the month on shipboard, of course, do not view it in this light, for as is usually the case with most seamen, they are somewhat short in the finances when the springtime arrives, and are eager to renew hostilities at the earliest possible moment.

There were retired at this port last fall, six sidewheel steamers, twenty-two propellers and steam barges, and thirty-three tow barges not including the list of tugs, yet the requsite repairs for the entire fleet, this spring, will amount to a small sum compared with that of former years, and up to his writing, with the exception of two or three instances, nothing has been done, which is chiefly owing to the continued cold weather.

Our esteemed friend, Captain A. H. Mills, the well-known harbor tug proprietor here, met with a sad bereavement in his family circle on Thursday last, by the sudden taking off of his wife, an estimable lady, who left behind a large circle of friends to moarn her untimely departure to a brighter shore. The cause of her death was appoplexy, and her illness did not exceed three hours. Hea funeral took place on Sunday afternoon, and was attended by a large concourse of sorrowing friends.

The scheme for the purchase of the steamer Saginaw, to make a floating bethel of her has fallen through. The boat is for sale, and if not disposed of shortly. will be sold at auction, April 10, and possibly the Evening Star may be included.

Captain D. Nicholson who commanded the propellor of Atlantic, of Grummond's Mackinac line, will sail the propeller Nashua the ensuing season. The Atlantic will be taken charge of by Captain J. R. Jones, late of the steamer Flora, while the latter will be run by Captain W. E. Comer who sailed her in years gone by.

Mr. Palmer, of Cleveland, of the firm of Palmer & Benham, was a visitor here on business matters one day last week.

The Riverside Iron Works, in this city, are casting light propeller wheels for the following named steamers respectively; Passaic, Ogemaw, Massasauga, Otego, Mayflower, W. A. Avery, besides two tugs.

The Bar Point light ship Duncombe, is undergoing repairs at Henry Jenkin's shipyard, Walkerville; also the tug Trudeau, and two scows.

Captain John Weston, of this city has purchased the steam barge Ada Allen, and will run her in the stone trade between Detroit and the islands, at the head of Lake Erie. It was reported that he had bought the steamer Hiawatha for the Detroit and Chatham route, which was a mistake,

The steamer Gazelle, owned by John P. Clark, of this city, will at the proper time return to Chicago, and engage in the excursion business, sailed by Captain J. Albeno. The Riverside owned by same party, plies between Detroit and Amherstburg, will be commanded by Captain Desana. The Pearl will ply as last year on the Mackinac route, sailed by Captain John Edwards. The Alaska, running between Detroit and Sandusky, by Captain Albert Harryman.

A correspondent of the RECORD wishes some information regarding some "Historic Guns," which is was his privilege to see a few years since in front of the City Hall,

Detroit. As is intimated they are British cannon, capture by Commodore Perry, in the ever memorable engagement on Lake Erie, September 10, 1813, and on the 29th of that month were landed by Perry at this port, on the military dock, between Wayne and Cass Streets. For several years they rested on Moore & Foote's dock, and served as hitching posts for vessels. Later Moore & Foote presented them to the city, when they were removed to where they are now situated. They are ten and eleven feet long respectively, and are thirty-two pounders, each twenty tons weight.

Captain William Crasby will run the tug Bob Anderson the coming season, and Captain George McLeod, as last season, sails the schooner Belle Hanscombe. The schooner William Horne, which, with the other two noted, are owned by John Damass, of this city, is at present without a master.

The steambarge Westford, Captain D. C. Clary, is having her boiler repaired at the Detroit Dry Dock Boiler Works, which will involve an expense of about $2,000. About $1,000 will also be expended in repairing the hull, which will be done by the Detroit Dry Dock Company, as soon as the boat can get the dock.

The steam yacht Pastime, Captain J. P. Hodges, was purchased last season of Mr. Geary, of New York, by Hiram Walker & Sons, of Walkerville, Mich., for a pleasure boat. The Pastime arrived at Detroit about the 1st of November. She is getting a new steel boiler at the hands of the Detroit Dry Dock Boiler Works. The Pastime is 110 feet over all, 16 feet beam, 8 feet depth, 7½ feet draft and has a speed of about 14 miles per hour. Her engines are steeple-compound, 10x10 and 12x20 inches. She is schooner rigged and has two cabins below decks, one forward and one aft, which are as elegantly furnished and finished as those of any yacht on the lakes. She will carry a crew of six men, who will go aboard about April 1, and the boat will remain in commission until December 1.

The old railway steamer Michigan, recently purchased by F. W. Gilchrist, of Alpena, is having her guards taken off. She will be used to carry logs from French River, Georgian Bay, to Alpena. The logs will be hoisted in by a steam pony and floated out by sinking the hull. Steam pumps and a tug will be serviceable.

Captain C. Richardson, of Alpena, was in the city last week, and we were permitted to examine a model of his rudder holder. In view of the many disabled rudders last season, and the subsequent expense, it would be strict economy and a good thing for the captain if owners would place this perfect invention on their boats, a discription of which we gave some months ago.

The machinery of the little excursion steamer to be built by the Detroit Dry Dock Company will consist of two engines, 18x18, and a high pressure boiler 7 feet 8 inches in diameter and 13 feet long, made to stand a working pressure of 100 pounds to the square inch. She will have twin screws 5 feet 6 inches in diameter. The contract calls for her delivery on June 1.

The Canadian side-wheel steamer Manitoba is still lying at Springwells'. She will be sold by the United States Marshal on March 28. She has never been repaired since being ashore near Southampton a year ago.

At Captain Oades' yard the steambarges Glasgow and Germania are receiving repairs, and the schooner Mears is receiving new stanchions and repairs. Spars are being finished for the new steambarge building at Gibraltar. The Germania will receive a new boiler.

Yesterday a paper entitled *Inland Marine*, Vol. 1, No. 1, I noticed lying on an office desk in this city, and as there was an extra copy I was privileged to take one. It is published in Chicago, and presents a good fitout, but up to this writing I have not been able to give it perusal, except a hasty glance at its first page, which has an article headed "Lake Marine," by W. W. Bates, which, were it not for a few errors would be full of interest. I beg, however, to take issue with Mr. B., when, as is asserted in the first column, that Father Hennepin, in 1679, built two vessels at Burntship Creek, on the Niagara River, that both went on a voyage to Mackinaw, one was lost, while one returned loaded with furs to the point of departure, where she now lies sunk. Mr. B., I regret to state, is widely astray in his history of that period, and while those versant with the true facts must smile at such a recital, I am at a loss to know from whence it emanates. The creek above spoken of will be something new to the old or later residents of the Niagara, and born within two miles of the locality myself, upwards of seventy years since, I certainly must confess my ignorance of such a place, or that it ever had an existence and nowhere do I find it in history. Mr. B. in his record of that early period makes no mention of Father La Salle, who was the leader and prime mover in that missionary enterprise, and it would appear that he is in blissful ignorance that only one vessel was built, that she proceeded to Green Bay, loaded with furs, and never returned. And furthermore, that she does not now lie sunk at, or near "Burntship Creek." But for want of space I cannot carry my criticisms any further, beside I have only had time to scane one column of the article in question. Yet more anon. J. W. H.

GRAND HAVEN.

At a late hour this Monday afternoon Captain Prindiville, of the Grand Trunk propeller Michigan, reached here, and reports the loss of his vessel on last Thursday. The steamer sank, but all the crew were taken off by the tug Arctic, which was near at the time. The Michigan had been locked in the ice for nearly four weeks. The captain reached the shore from the Arctic on the ice. The Michigan, an iron steamer was built in 1882 by the Detroit Drydock Co., at Wyandotte for the Goodrich Transportation Co. and was afterwards sold to the Detroit, Grand Haven & Milwaukee railroad Co. and in 1884 she again, changed hands, becoming the property of the Grand Haven Line. She was 1183 tons burden and valued for insurance at $145,000. The steamer Michigan left here February 9 in search of the propeller Oneida, which was imprisoned in the ice and short of provisions. She was caught in the ice and has been frozen in since. She sank about eighteen to twenty miles off Holland, at 4 o'clock Thursday afternoon last. Her strong iron sides gave way under the tremenduous pressure of ice which piled up around her to a height of from twenty-five to thirty-five feet, and which nearly tore away or bent in all conceivable shapes her port side, allowing the water to fill her compartments to the extent that soon made it apparent to her commander and crew that her fate was sealed, the steam pumps being insufficient to cope with the increasing volume of water. However, the men kept at work, hoping to keep the vessel afloat, and with the help of the tug Arctic, which was near by, to save the valuable propeller, but it was of no avail. Gradually the body of the vessel disappeared between the huge icebergs which lined her sides, crushing and grinding, until at last the crew were compelled to abandon the vessel and save themselves. The lifeboat was swung over the side, and half a dozen individuals rapidly pulled it some distance from the sinking propeller, while the rest prepared to follow. Captain Prindiville was the last to leave the boat. They got about a quarter of a mile from the propeller when the topmast disappeared in about four hundred feet of water. The trip to the tug Arctic, which lay about four miles off, was attended by considerable sufferling from the cold and danger from getting under the ice, which was continually moving. However, with the exception of slightly frozen ears and fingers, the entire crew reached the tug at night, where they were cared for. Had it not been for the close proximity of the Arctic not one of the crew would have reached the shore alive, as all would have perished from cold on the ice during the night and no one would have been left to tell the tale of the Michigan's fate. Nothing of the crew's personal property was saved as all went down with the propeller. The crew consisted of Captain Prindiville, Mate James McMann, Engineer Philip Roth, and ten men. Early Monday morning they left the Arctic firmly packed in the ice with no prospects of getting free, and arrived at Holland in the afternoon, and here in the evening. With the exception of being badly worn out from the dangerous trip of fourteen miles over the ice, causing sore feet, etc., the entire crew look well.

Nothing is known here of the Wisconsin's whereabout, and since the above disaster has become know grave fears for her safety are entertained. The Michigan was loaded with a small cargo, but both the vessel and freight are believed to be fully insured.

CLAYTON.

Specialto the Marine Record

A cold wave has been passing over this section with a strong breeze from the southwest for the last three days, and from 12 to 15 degrees below zero. This is a fine outlook for early navigation. The ice is solid about two foot thick, and speaking of snow there is no end to it. We have been blessed with railroad communication a train every day.

S. G. Johnson is doing some repairs on the sloop yacht Mable, owned by Captain James Stebbins of New York. Last year he took a trip around the lakes and the captain enjoyed the trip very much.

Mr. Fred Mercer has commenced to put the cabin on the new yacht of S. G. Johnson & Son.

Mr. S. G. Johnson & Son will this spring finish up their dock and erect a fine derrick to raise small yachts, to replace broken wheels, and repairs; also be in redliness to build steam yachts, sailing yachts and do general repairing to vessels and steam boats.

It seems queer to me, and I have often thought of the subject, considering that the vast amount of steam and sailing vessels on the great lakes why owners do not make better provisions for their vessels and steamers in trying to save their vessels in running before a gale of wind to make it more easy in reaching a port of safety. A few dollars outlay would save many a craft from going ashore from a disabled rudder or spars being carried away, or a cargo shifting, making them unmanageable, by having a canvas bag made in the shape of a funnel, and a few small holes punched in the small end, and the bag filled with oil to lubricate the waves. B.

KINGSTON.

A new boiler is being built in the Kingston foundry for the tug Augusta, of St. Catharines, owned by Mr. Helliwell, of that place. The diameter of the boiler is 6 feet 4 inches; length, 12 feet; front of furnace at bottom, 6 feet 8 inches. It has three direct flues, lap welded, 1 foot 5 inches in diameter, and 73 return tubes, 3 inches in diameter, and 10 feet in length. Its circumferential seams are double rivited, and the longitudinal ones treble rivited. It is built of the best Dalzell sheet plate, 7-16 inches thick and will be allowed 100 lbs. steam pressure. It has a horizontal steam drum 2 feet 6 inches in diameter and 6 feet in length, also double riveted seams. The work is being done under the supervision of John Hazlett, and his former work will be a guarantee that it will be first-class in every particular.—*Kingston Daily News.*

SARNIA.

The Sarnia Canadian says the work of refitting the Beatty steamers is now in full blast. The new low pressure cylinder ordered for the Ontario last season, was sent forward by the Detroit builders some time ago, and has been placed in position. The new low pressure cylinder for the United Empire has not yet been delivered, but is expected in a few days. The new cylinder for the Empire is larger than the old one, and the change is expected to give her a considerable increase of power and speed with same consumption of steam. Work on the Quebec is well advanced, her repairs being confined to the ordinary features of spring outfitting. It has not yet been decided whether the Sovereign will be placed in commission.

PORT ARTHUR.

We understand from the general manager of the Collingwood Line steamers that their boats will run upon the old route as usual, will perhaps some slight alterations as it is likely the Campana and City of Owen Sound will go down to Duluth, and the Francis Smith take all the north shore ports.

P. W. Bell, Hudson's Bay Factor at Michipicoten river, under date of 27th February reports propeller City of Owen Sound as lying very snug, and in good shape. She has not suffered any serious injury, and being frozen solid inside the shoals it is thought will be safe from any ice jams, and be easily floated in spring. Wreckers will go to her at the end of March to make a survey preparatory to tendering for the work.—*Sentinel.*

DULUTH.

The steamers Ocean and Prussia, which ran between Duluth and the north shore last season will be run on other routes the coming summer, the trade in which they were engaged having stopped on the completion of the Canadian Pacific road to those points.—*Evening Herald.*

The following budget of news is clipped from the Lake Superior News.

Duluth has 6,000,000 bushels of wheat in store, to be more exact 5,912,000 in the elevators and 101,000 afloat in the harbor. This is against 2,423,960 bushels in 1884, 1,281,950 in 1883 and 760,900 in 1882. Quite an increase, and one that is liatle to continue.

The coal docks of the Ohio Central and the Northwestern Fuel Co. are nearly empty, and probably will be entirely so before navigation opens. In fact the Ohio Co. has already received orders for all the coal on its docks, which it is shipping out as slowly as possible. The cold winter has rather upset the calculations of the companies and they will get in much larger supplies this summer than formerly. The O. C. B Co., for instance, instead of 180,000 tons as last year, will receive some 250,000 or 300,000 tons.

The new line of lake steamers which is announced to ply between Fairhaven, on Lake Ontario, and Duluth, during the coming season, will prove a great acquisition to the northwest. The line is owned and controlled by the Lehigh Valley railway company, and is intended to bring out coal from that company's mines, and to load on its east bound trips with hard wheat for export on through bills of lading via Perth-Amboy and New York or Philadelphia. Unless all indications are at fault the Canadian Pacific people will do a good deal of thinking about this line before the navigation season of 1885 draws to a close.

The Duluth correspondent of the Minneapolis Miller has this to say in regard to the L. S. T. Co.: "It is rumored that the Lake Superior Transit Co. will not run its steamers to Duluth the coming season, but will make Washburn, Wis., the western terminus. What truth there is in this rumor I know not, but if the company does try this scheme, it will probably be as badly left as it was some years ago when the same thing was attempted. This company has been so in the habit of dictating flour rates from Minneapolis east via Duluth that it cannot realize the fact that the old times are changed. Last year, finding it could not dictate rates, the Transit Co. attempted to divert Minneapolis flour via the Omaha road and the new town of Washburn, but it was beaten, and Duluth shipped more flour than ever before—some 800,000 barrels."

OSWEGO.

Mr. L. S. Norton, the new special inspector of customs, will make his headquarters here and will move his family to this city at once. Last year he held a position under the government in Texas, but has been promoted. His duties extend to other ports in this vicinity.

LITTLE KANAWHA RIVER IMPROVEMENT, LOCK NO. 5.

SEALED PROPOSALS in tuplicate will be received at this office until noon (local time), on Thursday, April 19, 1885, for furnishing the boilers and machinery, necessary for constructing Lock No. 5. on the Little Kanawha, River, West Virginia.

BOILERS AND MACHINERY REQUIRED.

2 Double-flue Boilers complete.
3 Steam Engines, complete.
2 Centrifugal pumps

Specifications, printed forms of proposals and information will be furnished on application to the undersigned.

JAMES C. POST,
CAPTAIN OF ENGINEERS, U. S. A.

U. S. Engineer Office. Custom House and Post Office Building, Cincinnati, O.
March 19, 1885.

IMPROVEMENT OF THE LITTLE KANAWHA RIVER, W. VA.
PROPOSAL FOR CEMENT.

SEALED PROPOSALS in triplicate will be received at this office until 12 o'clock, noon, (local time), on Thursday, April 9, 1885, for delivering on barges at Parkersburg, W. Va. of the Cement required for use in the construction of a lock in the Little Kanawha River, near Burning Springs, West Virginia.

Approximate quantity required, 3,000 barrels.

Specifications and all necessary information may be obtained on application to the undersigned.

JAMES C. POST,
CAPTAIN OF ENGINEERS, U. S. A.

U. S. Engineer Office, Custom House and Post Office Building, Cincinnati, Ohio.
March 19, 1885.

Barge for Sale.

Capacity 260,000 to 280,000 on 9 feet of water. Three years ago $3,600 was laid out on her, and some repairs, amounting to over $1,000 since. She can be bought very reasonable. Address

WARNER & BECKER,
Room 10, Arcade Building, St. Clair St.,
Cleveland, Ohio.

HISTORY OF LAKE NAVIGATION.

Written for the Marine Record:

BY J. W. HALL.

CHAPTER IX.

On the twenty-fifth they were becalmed until noon, when favored by a northerly wind they started northwest, suddenly the wind veered to the southwest. At midnight they changed their course to the north, to avoid a cape since known as Presque Isle which projected into the lake. Hardly had they doubled this when a furious gale compelled them to beat to windward undr main and foresail and then to lie-to until morning. On the twenty-sixth the violence of the gale obliged them to haul down their topmasts, to lash their yards to the deck, and drift at the mercy of the storm. At noon the waves ran so high, and the lake became so rough as to compel them to stand in for land. At this juncture, as reated by Hennepin, La Salle entered the cabin in much alarm, exclaiming that he commended his enterprise to the Divine protection. We had been accustomed, says Hennepin, "during the entire voyage, to fall on our knees, morning, and evening, to say our prayers publicly and sing some hymns of the church. But the storm was now so violent that we could not remain on the deck. In this extremity each one performed his devotions independently as well as he could, except our pilot, who could never be persuaded to follow our example. He complained that the Sieur de la Salle had brought him thus far to lose in a fresh water lake the glory he had acquired in many successful voyages by sea."

In this fearful crisis, La Salle was induced by the importunity of the Recollects to make a special vow, and by taking St. Anthony de Padua, the tutelary saint of the sailor, for his patron he promised that if God would deliver them from their present peril, the first chapel erected in Louisiana should be dedicated to the memory of that vererated saint. The vow seems to have met a response, for the wind slightly decreased. They were obliged, however, to lie-to, drifting slowly all night unable to find either anchorage or shelter. On the twent-seventh they were driven north westerly until evening, when, under favor of a light southerly breeze, they rounded Point St. Ignace, and anchored in the calm waters of the bay of Missillimackinac, described as a sheltered harbor protected on all sides except from the southeast. Here our voyagers found a settlement composed of Hurons (*Kis-ka-kons*), Ottawas, and a few Frenchmen. A bark covered chapel bore the emblem of the cross erected over a mission planted by the Jesuits. Like a dim taper it shone with feeble light in a vast wilderness of pagan darkness. Here it was that Marqueth and Joliet priest and layman, organized six years before their memorable voyage down the Mississippi and here the bones of the honored missionary found a grave until rifled by some sacrilegious relic hunter. A few fragments that were spared have been gathered and preserved with pious care, soon to be deposited under a monument which will be visble far and wide over land and water, and show to coming generations where the thrice buried remains of the heroic Marquette have found a final resting place. The safe arrival of the Griffon in this secure haven was the occasion of great rejoicing to the weary voyagers. A salute was fired from the deck and thrice responded to by the fire-arms of the Hurons on shore. Mass was gratefully celebrated by the Franciscans in the chapel of the Ottawas. La Salle attended, robed in fine clothes, including a scarlet cloak bordered with gold lace, his arms being laid aside in the chapel in charge of a sentinel. In the distance the Griffon lay at anchor, presenting with her fine equipments an imposing appearance. More than a hundred bark canoes gathered around her, attracted by the novel spectacle. La Salle found at Missillimackinac a part of the fifteen men that he had sent forward from Fort Frontenac to trade with the Illinois Indians, and whom he supposed were already among the latter. They had listened to reports on the way that the plans of La Salle were visionary, and that the Griffon would never reach Missillimackinac. La Salle seized four of the deserters, and learning that two more were at Sault Saint Maire, he dispatched Fonty on the twenty-ninth of September with six assistants to arrest them. As the season was rapidly passing away he was unable to wait for Fonty's return, and gave orders for the departure of the Griffon. On the twelfth of September, five days before Fonty's return, she sailed out of the Straits into Lake Michigan, then called Illinois. A prosperous run brought her to an island, since called Washinton Island, forty leagues from Missillimackinac inhabited by the Pottawattamies. It is situated at the enterance of La Grand Bale, a name since corrupted into Green Bay. Some of the party were found there who had been sent forward by La Salle to the Illinois the year previous. They had collected a large quantity of furs to the amount of 12,000 pounds, in anticipation of the arrival of the Griffon. Our navigators found secure shelter in a small bay now known as Detroit Harbor, on the southerly side of the island, where they rode out at anchor a violent storm of four days' duration.

As winter was now approaching, La Salle loaded the Griffon with the furs which had thus been collected, intending to send them to the store-house he had built above the Falls, from there to be transhipped to Fort Frontenac, in satisfaction of the claims of his creditors. His own purpose was to pursue his route by canoe to the head of lake navigation, and from there to the country of the Illinois. Being unable to obtain more than four canoes, which were wholly insufficient to contain all the merchandise and various articles destined for his southern enterprise, he was obliged to leave a portion of his goods in the Griffon with directions to the pilot to deposit them at Missillimackinac, until the vessel should call for them on the return voyage.

The Griffon sailed for the Niagara on the eighteenth of September, but without La Salle, a fatal error which probably caused the loss of the vessel, her cargo and crew. A favorable wind bore her from the harbor, and with a single gun she bid adieu to her enterprising builder, who never saw her again. She bore a cargo valued with the vessel at fifty or sixty thousand francs, obtained at great sacrifice of time and treasure. She was placed under the command of the pilot, Luc, assisted by a supercargo and five good sailors, with directions to call at Missillimackinac, and from thence proceed to the Niagara. Nothing more was heard of her. On the second day after she sailed a storm arose which lasted five days. It was one of those destructive gales which usually prevail at that season on the northern lakes. She is reported to have been seen among the islands in the northerly end of Lake Michigan, two days after sailing, by some Pottawattamies who advised the pilot to wait for more favorable weather. They last saw her half a league from the shore helplessly driven by the storm upon a sandy bar, where she probably founderd, a total loss with all on board. A hatchway, a cabin door, the truck of a flagstaff, a piece of rope, a pack of spoiled beaver skins, two pair of linen breeches, torn and spoiled with tar, were subsequently found, and recognized as relics of the ill-fated ship. The day after she sailed, La Salle, with the Recollects and fourteen men, left in four canoes laden with a forge and its appurtenances, carpenters', joiners' and surveyors' tools, with arms and merchandise, and pursued his way along the western shore of Lake Michigan and entered the Illinois and Mississippi rivers in the prosecution of his enterprise. After leaving Green Bay he had hardly crossed half way from the island to the main shore when the same storm in which the Griffon was wrecked burst upon his party in all its fury. Lhey succeeded in landing in a small sandy bay, where they were detained five days waiting for the abatement of the tempest. In the meantime La Salle was filled with anxious forebodings as to the safety of his vessel. Many months departed before he heard of his loss.

It was not the only disaster, but one of a series, which befell this enterprising explorer. Yet his iron will was not subdued nor his ardor diminished. He continued to prosecute his discoveries under the most disheartening reverses, with a self-reliance and energy that never faltered. He was equal to every situation, whether sharing the luxuries of civilized life or the privations of the wilderness, whether contending with the snows of a Canadian winter or the burning heats of Texas, whether paddling his canoe along the northern lakes or seeking by sea for the mouth of the Mississippi. His eventful life embodied the elements of a grand epic poem, full of romantic interest and graphic incident, alternating in success and failure, and culminating in a tragic death.

[Continued next week.]

REMINISCENCES OF MANITOWOC'S SHIPYARDS.

MANITOWOC, WIS., March 14.

Special Correspondence Marine Record.

Ship building at Manitowoc, Wisconsin, dates back to 1847, when the first vessel, the schooner Citizen, was built by Mr. Ross. She was 64 tons burden, sailed by Captain Edwards, and was lost near Racine a few years after. Soon after this followed the construction of the following craft; a few of them are still afloat: Anne Thorline, Nabob, Joseph Vilas, Baench, Challenge, Colonel Glover, Clipper City, and Gesine, built in 1853; Transit, 1854; H. Rand, 1856; El Tempi, Waukeshaw, Board of Trade, Sea Gem, etc. In 1860 the first steamboat was built, being the propeller Union, followed shortly by the Victor, a peculiar boat having screw wheels on her sides. She made one trip on an excursion to Two Rivers, which trial proved so unsatisfactory that she was remodeled into a side-wheeler, named the Sunbeam. She was lost in a gale on Lake Superior in 1863. Twenty-one lives were lost, only one saved to tell the fate of his lost companions.

Manitowoc's location is well adapted for ship building. In years past during the winter months all was bustle and activity in the the shipyards, and a vast amount of money expended in new craft and in remodeling old ones. Some valuable improvements originated there, and were generally adopted on the lakes.

Manitowoc built vessels can be found floating in all the navigable seas. Among a large number that have made voyages to foreign countries may be mentioned the Challenge, John Schuette, G. C. Trumph, Thistle, City of Manitowoc, etc.

In the early days the farmers in the timber land in the vicinity of Manitowoc made many an honest dollar in cutting and hauling hewed oak timber to the yards. If the roads were bad and timber scarce, there would be a strife between the buyers in bidding up on it. This proved profitable to the seller, unsatisfactory to the buyer, and amusing to the crowd looking on. Since the advent of the railroad the timber is run in by rail from the interior of the State, and of the choicest quality. Wisconsin oak is said to be superior to any grown on the continent.

The launching of the ship used to be considered an event not to be missed by the average Manitowoc schoolboy, and in vain would the impatient school teacher await his scholars, who invariably played hookey or run away. On such occasions they could be found coaxing innocent grangers to come down to the river opposite the vessel, and there, while gazing in mute astonishment in seeing the large craft slide off the ways into her element, and before they could think, would find themselves floundering about in the huge wave that dashed against the banks, much to the delight of the boys, who generally managed to escape a drenching after the launch. Scraping off the tallow from the ways, getting generally greased up, coming home and receiving a trouncing are among the early experiences of the winter.

The steamers of the Goodrich line have all been built at Manitowoc by the veteran Green S. Rand, who, now in company with Henry Berger, control the drydock, said to be the largest on the lakes, and this firm has turned out many well known craft. It would take too long to give a full list, and will give only a few. Among the steam craft are the Orion, Northwest, Corona, Manitowoc, Sheboygan, Chicago, Naverino, Oconto, Depere, Menorninee, City of Ludington, Muskegon, City of Manitowoc, A. A. Carpenter, Geo. Pankratz, J. C. Pervet. Tugs Arctic, Minnie, John Canfield, M. A. Knapp, Williams. Schooners Whitbeck, S. Stevenson, Penobscot, Lydia, S. V. Jones, Goodman, Geo. Murray, J. S. Case, Joseph Dural, C. C. Barnes, Burt Barnes, H. B. Rurger, etc.

The late Jonah Richards was one of the pioneer ship builders commencing with the tug Jonah Richards, schooner Alice Richards, H. C. Richards, tugs Willie Richards, Mocking Bird, schooner May Richards, and the last one the steambarge Rube Richards, and many others.

Hansen & Scove built a noble lot of craft, among them the Fleetwing, H. M. Scove, John Schuette, Granger, Daisy Day, J. W. McLaren, rebuilt U. S. cutter Andrew Johnson, Christine Nillson, Kate L. Bruce, Keller, Collins.

Mr. Ornes is also a carpenter who has made a good reputation in building the Minnehaha, Imperial, Success, Mishicott, Linderia, and others.

Jim Butler is the well-known builder of the David Vance, also the 'Baby Vance," the Henrietta Esch, an exact fac-simile of the David Vance, (she is now sailing in the West Indian trade), the Blazing Star, Mystic Star, Lalla Rookh; also the ill-fated Cornelia and B. Windiati, lost in the fall storms of 1876. His last craft was Captain Bundy's Gospel ship Glad Tidings. CHAS. BURMEISTER.

OIL ON THE WATERS.

The use of oil as a preventive of disasters is certainly increasing. Some few adverse reports have been made, but the majority of tests have been favorable. Those shipmasters who are yet skeptical, or who have neglected to try oil as a subduer of "combers" should be guided somewhat by the report of Captain Tranmar, of the British steamship Lake Champlain, which arrived at Liverpool from New York. Captain Tranmar says:—"In running before the gale of the 24th of January, when the sea was breaking very heavily and flooding the decks, I determined to try the oil experiment. I commenced first by towing a bag from each bow. The bags had been filled with oakum, well saturated with paint oil. The effects was wonderful, but the bags gave out, owing to the vessels going through the water so quick. I next made two small canvas bags and filled them with American mineral sperm oil. After puncturing them with a large needle, I suspended one from each bow, but the result was not so good as the paint and oakum, I changed and put in paint oil, which seemed to spread more on the water, and the result was a clear, calm, unruffled streak as far as the eye could see. I have been thirty years at sea, but have never seen the experiment tried before, so it would be presumptious in me to offer an opinion after only one trial, but I was really astonished at the effect." We can in view of the above statement, urge upon other shipmasters the advisability of making the oil test.—*Maritime Register.*

NEW STYLE CANAL BOAT.

The Schenectady Union says: "In progress of construction on the bank of the Mohawk basin, near the Green Island bridge, is a canal boat, which when completed, will be a model craft for comfort and convenience and a great improvement on the old style of canal boats. This boat is being built for Joseph Hunt, an extensive canal stable keeper, of West Troy, and the dimensions will be that of the ordinary boat. The bottom of the bow will be solid white pine, and the floor timbers are laid diagonal instead of lengthwise. The deck will be several inches thicker than the ordinary decks on boats. The bolting of the deck takes the place of beams, and the cabin will be fitted up in neat style with all the late improvements. The cost of the average boat is $7,000, but this craft, Mr. Crafts states, will cost but $2,500. By constructing the craft in this manner, a vast amount of money is saved and the boat made more durable and lasting. The boat will be completed by May 1, and will run between New York and Buffalo."

FLOATING ON ICE.

On Sunday afternoon five cows were driven to St. Clair river, near Recor's Landing, to get a drink, and when they got on to the ice it broke away from the shore and floated down the river. The cows remained on the ice, and were carried to the blockade above Marine City. The steamer Clara was engaged to run from St. Clair to the blockade to secure the cows, and the plan was successful. One of the bovines attempted to jump on to another cake of ice and fell into the water, but she was lassoed and pulled out.—*Port Huron Weekly Times.*

NOTICE.

Send your bills against the Tug DAVE AND MOSE to George L. Colwell, Harrisville, Mich. If they are not paid by him send them to A. H. Mills, Detroit, Mich.

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